

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An air ~~conditioner device~~treatment apparatus, comprising:
a housing;
a first electrode ~~, disposed in~~configured to be supported by said housing;
a second electrode, ~~removably disposed~~ configured to be supported by in said housing;
and
a cleaning element configured to be supported by the housing, the cleaning element having an inner wall defining an opening sized to receive a portion of the first electrode such that the inner wall is at least partially in contact with the first electrode; and
a cleaning element moving mechanism, the cleaning element moving mechanism being operable to cause the cleaning element to move relative to the first electrode, means, connected with said second electrode, for frictionally the inner wall cleaning said first electrode during the movement when said second electrode is manually removed from said housing.

Claim 2 (currently amended): The ~~device~~air treatment apparatus of claim 1, wherein said ~~means for frictionally cleaning~~ cleaning element is selected from the group consisting of:
(a) includes a length of flexible insulating material a length of material defining a slit; (b) a structure defining a substantially circular opening; and (c) a bead.

Claim 3 (currently amended): The air treatment apparatus~~device~~ of claim 21, wherein the first electrode is selected from the group consisting of: (a) a rectangular-shaped electrode; (b) a wire-shaped electrode; and (c) a circular-shaped electrode~~said length of flexible insulating material is sufficiently long to span the distance between said first electrode and said second electrode when said second electrode is at least partially in said housing.~~

Claim 4 (currently amended): The air treatment apparatus~~device~~ of claim 3, wherein the second electrode is selected from the group consisting of: (a) a rectangular-shaped electrode; (b) a wire-shaped electrode; and (c) circular-shaped electrodes~~said length of insulating material includes a first end, associated with said second electrode, and a second end that frictionally cleans said first electrode.~~

Claim 5 (currently amended): The air treatment apparatus~~device~~ of claim 42, wherein said second end defines a slit within which said first electrode fits when said second electrode is disposed at least partially in said housing~~cleaning element has a flexible characteristic.~~

Claim 6 (currently amended): The air treatment apparatus~~device~~ of claim 2, wherein said length of flexible insulating material comprises a strip or a sheet of flexible insulating material~~the cleaning element has an insulating material.~~

Claim 7 (currently amended): The air treatment apparatus~~device~~ of claim 12, wherein said cleaning element is configured to~~means for frictionally cleaning includes a length of material~~ said first electrode.

Claim 8 (original): An air conditioner device, comprising:
a housing;
an emitter electrode, disposed in said housing;
a collector electrode, removably disposed in said housing; and
means associated with said collector electrode for frictionally cleaning said emitter electrode when said collector electrode is manually removed from said housing and when said collector electrode is returned to said housing.

Claim 9 (original): The device of claim 8, wherein said means for frictionally cleaning includes a length of flexible insulating material having a first end connected with said collector electrode and a second end that extends toward said emitter electrode.

Claim 10 (original): The device of claim 9, wherein said length of flexible insulating material comprises a strip or a sheet of flexible insulating material.

Claim 11 (original): The device of claim 10, wherein said length of flexible insulating material scrapes against at least a portion of said emitter electrode when said collector electrode is removed from and returned to said housing.

Claim 12 (original): The device of claim 8, wherein said means for frictionally cleaning includes a length of flexible insulating material that moves when said collector electrode moves, and wherein said length of flexible insulating material scrapes against at least a portion of said emitter electrode when said collector is moved.

Claim 13 (original): The device of claim 12, wherein said length of flexible insulating material comprises a strip or a sheet of flexible insulating material.

Claim 14 (original): An air conditioner device, comprising:
a housing;
an emitter electrode, disposed in said housing;
a collector electrode, movably disposed in said housing; and
means associated with said collector electrode for frictionally cleaning said emitter electrode when said collector electrode is moved relative to said housing.

Claim 15 (original): The device of claim 14, wherein said means for frictionally cleaning includes a length of flexible insulating material.

Claim 16 (original): The device of claim 14, wherein said means for frictionally cleaning includes a length of material.

Claim 17 (original): The device of claim 16, wherein said length of material is sufficiently long to span the distance between said emitter electrode and said collector electrode.

Claim 18 (currently amended): An ~~air conditioner device~~air treatment apparatus comprising:
a housing;

an emitter first electrode configured to be supported by the, ~~disposed in said housing~~
~~such that said first electrode is stationary within said housing;~~

a collector second electrode configured to be supported by the, ~~removably disposed in~~
~~said housing, the collector electrode being movable between a first position and a second~~
~~position relative to the housing such that said second electrode can be manually removed from~~
~~said housing and then returned to a resting position in said housing; and~~

a cleaning element having an inner wall defining an opening sized to receive a portion of
the emitter electrode such that the inner wall is at least partially in contact with the emitter
electrode;

an arm configured to operatively connect the cleaning element to the collector electrode,
the arm being operable to cause the cleaning element to move relative to the emitter electrode
during the movement of the collector electrode, the inner wall cleaning the emitter electrode
during the movement; and

a high-voltage generator supported by ~~disposed in said housing, to the voltage generator~~
~~provide being operable to provide~~ a potential difference between said ~~first emitter~~ electrode and
said ~~second collector~~ electrode ~~when said second electrode is in the resting position in said~~
~~housing; wherein said stationary first electrode is frictionally cleaned when said second electrode~~
~~is manually removed from said housing.~~

Claim 19 (currently amended): The ~~air treatment apparatus device~~ of claim 18, wherein
said cleaning element is selected from the group consisting of: (a) including: a flexible a length
of material defining a slit; (b) a structure defining a substantially circular opening; and (c) a
headlength of insulating material associated with said second electrode that scrapes against at
least a portion of said first electrode, to thereby frictionally clean said first electrode, when said
second electrode is manually removed from said housing.

Claim 20 (currently amended): The air treatment apparatus~~device~~ of claim 19, wherein said cleaning element has insulating material~~length of flexible insulating material is sufficiently long to span the distance between said first electrode and said second electrode.~~

Claim 21 (currently amended): The air treatment apparatus~~device~~ of claim 19, wherein said cleaning element ~~stationary first electrode is also is configured to frictionally cleaned when said emitter~~~~second electrode is manually returned to said housing.~~

Claim 22 (currently amended): The air treatment apparatus~~device~~ of claim 19, wherein said cleaning element has a ~~length of flexible characteristic insulating material comprises a strip or a sheet of flexible insulating material.~~

Claim 23 (currently amended): The air treatment apparatus~~device~~ of claim 18, wherein the emitter electrode is selected from the group consisting of: (a) a rectangular-shaped electrode; (b) a wire-shaped electrode; and (c) a circular-shaped electrode~~including: a flexible strip of insulating material associated with said second electrode that scrapes against at least a portion of said first electrode, to thereby frictionally clean said first electrode, when said second electrode is manually removed from said housing and when said second electrode is returned to said housing.~~

Claim 24 (currently amended): The air treatment apparatus~~device~~ of claim ~~23~~18, wherein the collector electrode is selected from the group consisting of: (a) a rectangular-shaped electrode; (b) a wire-shaped electrode; and (c) a circular-shaped electrode~~said flexible strip of insulating material is sufficiently long to span the distance between said first electrode and said second electrode.~~

Claim 25 (currently amended): The air treatment apparatus~~device~~ of claim 18, wherein the collector electrode is configured to be removable from said housing~~including: a flexible length of insulating material associated with said second electrode and biased to project toward said first electrode; and a vane projecting from an interior region of said housing such that said vane contacts said length and urges said length away from said first electrode when said second electrode is in the resting position in said housing.~~

Claim 26 (currently amended): The air treatment apparatus~~device~~ of claim ~~25~~18, wherein the inner wall is configured to clean the emitter electrode ~~said length disengages from contact with said vane, and by serapes scraping~~ against at least a portion of said ~~first emitter electrode, soon after said second electrode is lifted from the resting position, while being removed from said housing.~~

Claim 27 (currently amended): The air treatment apparatus~~device~~ of claim 25, wherein ~~said length of flexible insulating material comprises a strip or a sheet of flexible insulating material~~collector electrode is operatively coupled to a handle.

Claim 28 (original): An air conditioner device, comprising:

a housing;

an emitter electrode, disposed in said housing such that said emitter electrode is stationary within said housing;

a collector electrode, removably disposed in said housing such that said collector electrode can be manually removed from said housing and then returned to a resting position in said housing;

a high voltage generator disposed in said housing, to provide a potential difference between said emitter electrode and said collector electrode when said collector electrode is in the resting position in said housing; a member connected to said collector electrode; and

a flexible length extending from said member toward said emitter electrode; wherein flexible length scrapes against at least a portion of said emitter electrode as said collector is manually removed from and returned to said housing, to thereby clean said emitter electrode.

Claim 29 (original): The device of claim 28, further comprising a handle to assist a user in manually removing and returning said collector electrode.

Claim 30 (original): The device of claim 29, further comprising a vane projecting from an interior region of said housing such that said vane contacts said length and urges said length upward and away from said emitter electrode when said collector electrode is in the resting position in said housing.

Claim 31 (original): The device of claim 30, wherein said length disengages from contact with said vane, and scrapes against at least a portion of said emitter electrode, soon after said collector electrode is lifted from the resting position, in the process of being removed from said housing.

Claim 32 (original): An air conditioner device, comprising:

a housing;

an emitter electrode, disposed in said housing such that said emitter electrode is stationary within said housing;

a collector electrode, movably disposed in said housing such that said collector electrode can be moved from and then returned to a resting position in said housing;

a high voltage generator disposed in said housing, to provide a high voltage potential to said collector electrode when said collector electrode is in the resting position;

a member connected to said collector electrode; and

a flexible length extending from said member toward said emitter electrode; wherein flexible length scrapes against at least a portion of said emitter electrode as said collector is moved relative to said housing, to thereby clean said emitter electrode.

Claim 33 (original): An air conditioner device, comprising:

an upstanding, elongated housing;

an ion generating unit positioned in said housing, including: an emitter electrode; a movable collector electrode, elongated along the direction of elongation of said housing; and

a user-liftable handle secured to said movable collector electrode, said handle accessible through an opening in a top portion of said housing, to assist a user with lifting said collector electrode from a resting position within said housing; and

a cleaning member associated with said collector electrode, wherein said cleaning member frictionally cleans said emitter electrode when said collector is lifted using said handle.

Claim 34 (currently amended): ~~An~~The air conditioner device of claim 33,
~~comprising; wherein said cleaning member has an insulating material~~

~~a housing;~~

~~a first electrode, disposed in said housing;~~

~~a second electrode, removably disposed in said housing; and~~

~~a cleaning member connected with said collector electrode, wherein said cleaning member frictionally cleans said emitter electrode when said collector is removed from said housing.~~

Claim 35 (currently amended): ~~An~~ The air conditioner device of claim 33, comprising:
including an arm configured to operatively couple the cleaning member to the collector electrode
a housing;
a first electrode, disposed in said housing;
a second electrode, removably disposed in said housing; and
a flexible length of material, connected with said second electrode, for frictionally
cleaning said first electrode when said second electrode is removed from said housing.

Claim 36 (currently amended): The air conditioner device of claim 35, wherein said
cleaning member is selected from the group consisting of: (a) a length of material defining an
opening; (b) a length of material defining a slit; (c) a structure defining an opening; (d) a
structure defining a substantially circular opening; and (e) a bead defining an opening
flexible length of material comprises a flexible strip or a sheet.

Claim 37 (currently amended): ~~An~~ The air conditioner device of claim 33, comprising:
wherein the collector electrode is selected from the group consisting of: (a) a rectangular-shaped
electrode; (b) a wire-shaped electrode; and (c) a circular-shaped electrode
-----a housing;
a first electrode, disposed in said housing such that said first electrode is stationary
within said housing;
a second electrode, removably disposed in said housing such that said second electrode
can be manually removed from said housing and then returned to a resting position in said
housing; and
a high voltage generator disposed in said housing, to provide a high voltage potential to
said second electrode when said second electrode is in the resting position in said housing;
wherein said stationary first electrode is frictionally cleaned when said second electrode
is moved relative to said housing.

Claim 38 (currently amended): ~~An~~The air conditioner device of claim 33,
~~comprising; wherein the emitter electrode is selected from the group consisting of: (a) a~~
~~rectangular-shaped electrode; (b) a wire-shaped electrode; and (c) a circular-shaped electrode~~

~~a housing;~~

~~an emitter electrode, disposed in said housing such that said emitter electrode is~~
~~stationary within said housing;~~

~~a collector electrode, removably disposed in said housing such that said collector~~
~~electrode can be manually removed from said housing and then returned to a resting position in~~
~~said housing;~~

~~a high voltage generator disposed in said housing, to provide a high voltage potential to~~
~~said collector electrode when said collector electrode is in the resting position in said housing;~~

~~a member connected with said collector electrode; and~~

~~wherein said member scrapes against at least a portion of said emitter electrode as said~~
~~collector is moved relative to said housing, to thereby clean said emitter electrode.~~